STRUCTURE UPLOADED					
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=> file registry
COST IN U.S. DOLLARS

SINCE FILE ENTRY

TOTAL

FULL ESTIMATED COST

1 21

0.21

FILE 'REGISTRY' ENTERED AT 10:01:55 ON 18 JUL 2007 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

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STRUCTURE FILE UPDATES: 17 JUL 2007 HIGHEST RN 942577-08-4 DICTIONARY FILE UPDATES: 17 JUL 2007 HIGHEST RN 942577-08-4

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH December 2, 2006

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=>

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chain nodes :
11 12 13 14
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155 156 162
ring nodes :
1 2 3 4 5 6
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chain bonds:
1-51 2-41 3-50 4-53 8-43 8-44 9-45 9-46 10-47 10-48 11-12 12-13 13-14
14-15 14-26 15-16 16-17 17-18 18-19 18-25 19-20 20-21 21-22 22-23 22-24
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 ring bonds :
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 exact/norm bonds :
 1-51 2-41 3-50 4-53 5-7
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 152-153
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 154-155 155-156
 normalized bonds :
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 G1:0,S,N
 G2:0,N
G3:H, CH3
G4:CH3,COOH,[*1],[*2],[*3],[*4],[*5],[*6]
G5:[*7],[*8],[*9],[*10],[*11],[*12],[*13]
Match level :
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```

L1 STRUCTURE UPLOADED

=> d l1

L1 HAS NO ANSWERS

L1 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT * Structure attributes must be viewed using STN Express query preparation.

=> s l1
SAMPLE SEARCH INITIATED 10:03:09 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 8750 TO ITERATE

22.9% PROCESSED 2000 ITERATIONS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

0 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

L2 0 SEA SSS SAM L1

=> s l1 sss full FULL SEARCH INITIATED 10:03:29 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 174859 TO ITERATE

100.0% PROCESSED 174859 ITERATIONS 34 ANSWERS SEARCH TIME: 00.00.01

L3 34 SEA SSS FUL L1

=> d 13 scan

L3 34 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 4-Thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid, 6-[[[[[(3,4-dihydro-2,2,7,8-tetramethyl-2H-1-benzopyran-6-yl)oxy]acetyl]amino]-3,3-dimethyl-7-oxo-, [2S-[2α,5α,6β(S*)]]- (9CI)
MF C31 H37 N3 O7 S

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):5

L3 34 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN

IN 4-Thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid, 6-[[[[[(3,4-dihydro-2,2,7,8-tetramethyl-2H-1-benzopyran-6-yl)thio]acetyl]amino]phenylacetyl]amino]-3,3-dimethyl-7-oxo-, [2S-[2α ,5 α ,6 β (S*)]]- (9CI)

MF C31 H37 N3 O6 S2

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L3 34 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN

IN Propanoic acid, 3-[(3,4-dihydro-2,2,5,7,8-pentamethyl-2H-1-benzopyran-6-yl)oxy] - (9CI)

MF C17 H24 O4

$$\begin{array}{c} \text{Me} \\ \text{Me} \\ \text{O} \\ \text{Me} \\ \text{HO}_2\text{C}-\text{CH}_2-\text{CH}_2-\text{O} \\ \text{Me} \\ \end{array}$$

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L3 34 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN

IN Poly(oxy-1,2-ethanediyl), α -[3,4-dihydro-2,7,8-trimethyl-2-(4,8,12-trimethyltridecyl)-2H-1-benzopyran-6-yl]- ω -hydroxy- (9CI)

MF (C2 H4 O)n C28 H48 O2 ·

CI PMS

PAGE 1-A

PAGE 1-B .

- (CH₂)₃ - CHMe₂

L3 34 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN

IN Ethanol, 2-[[(2R)-3,4-dihydro-2,5,7,8-tetramethyl-2-[(4R,8R)-4,8,12-trimethyltridecyl]-2H-1-benzopyran-6-yl]oxy]- (9CI)

MF C31 H54 O3

Absolute stereochemistry.

Me Me
$$(CH_2)_3$$
 $(CH_2)_3$ $(CH$

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L3 34 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN

IN Acetamide, 2-[[(2R)-3,4-dihydro-2,5,7,8-tetramethyl-2-[(4R,8R)-4,8,12-trimethyltridecyl]-2H-1-benzopyran-6-yl]oxy]- (9CI)

MF C31 H53 N O3

Me Me (CH₂)₃ R (CH₂)₃ R (CH₂)₃ CHMe₂

$$Me Me Me$$

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

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     156 162
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 ring nodes :
 1 2 3 4 5
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 chain bonds :
 1-51 2-41 3-50 4-53 8-43 8-44 9-45 9-46 10-47 10-48 11-12 12-13 13-14
 14-15 14-26 15-16 16-17 17-18 18-19 18-25 19-20 20-21 21-22 22-23 22-24
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  56-58 59-60
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                           62-72 62-163 65-66 65-69 65-70 66-67 66-68 68-71
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 ring bonds :
 1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-10 7-8 8-9 9-10
 exact/norm bonds :
 1-51 2-41 3-50
                 4-53 5-7 6-10
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 153-154 154-155 155-156
 normalized bonds :
 1-2 1-6 2-3 3-4 4-5 5-6 56-57 56-58 81-82 81-83 84-85 84-86
```

G1:0,S,N

G2:0,N

G3:H,CH3

G4:CH3,COOH,[*1],[*2],[*3],[*4],[*5],[*6]

G5:[*7],[*8],[*9],[*10],[*11],[*12],[*13]

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Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
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L4 STRUCTURE UPLOADED

=> file caplus COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 174.35 174.56

FULL ESTIMATED COST

FILE 'CAPLUS' ENTERED AT 10:05:32 ON 18 JUL 2007 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

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L5

13 L3/THU

(L3 (L) THU/RL)

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3386616 PRY<2001

L6 8 L5 AND (PY<2001 OR AY<2001 OR PRY<2001)

=> d l6 1-8 ti abs bib hitstr

L6 ANSWER 1 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN

TI Preparation of tocopherols, tocotrienols, other chroman and side chain derivatives for therapeutic use in the prevention and treatment of cancer GI

Chroman derivs., such as I [X = 0, S, NR6; Y = 0, NR6; R1 = carboxyalkyl, carboxyalkenyl, etc.; R2, R3, R4 = H, Me, alkyl, etc.; R5 = alkyl, alkenyl, etc.; R6 = H, alkyl], were prepared for use in antitumor pharmaceutical compns. for inducing apoptosis in a cell, particularly a cancer cell. Thus, α -tocopherol derivative II was prepared in 88% yield by a reaction of BrCH2CO2Me with (R,R,R)- α -tocopherol using NaOH in DMF. The prepared chromans were assayed for growth inhibitory and apoptotic activity against a variety of human cancer cell lines.

AN 2004:618733 CAPLUS <<LOGINID::20070718>>

DN 141:174332

TI Preparation of tocopherols, tocotrienols, other chroman and side chain derivatives for therapeutic use in the prevention and treatment of cancer

IN Sanders, Bob G.; Kline, Kimberly; Hurley, Laurence; Gardner, Robb; Menchaca, Marla; Yu, Weiping; Ramanan, Puthucode N.; Liu, Shenquan; Israel, Karen

PA Research Development Foundation, USA

SO U.S., 48 pp., Cont.-in-part of U.S. Ser. No. 404,001. CODEN: USXXAM

DT Patent

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             LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
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             BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
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     MARPAT 141:174332
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     RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic
     preparation); THU (Therapeutic use); BIOL (Biological study);
     PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
        (preparation of tocopherols, tocotrienols, other chroman and side chain
        derivs. for therapeutic use in prevention and treatment of cancer)
RN
     200701-54-8 CAPLUS
     Ethanol, 2-[[(2R)-3,4-dihydro-2,5,7,8-tetramethyl-2-[(4R,8R)-4,8,12-
CN
```

trimethyltridecyl]-2H-1-benzopyran-6-yl]oxy]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Me Me
$$(CH_2)_3$$
 $(CH_2)_3$ $(CH$

IT 261929-53-7P 261929-60-6P 261929-61-7P 261929-62-8P 261929-67-3P 261929-70-8P RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of tocopherols, tocotrienols, other chroman and side chain derivs. for therapeutic use in prevention and treatment of cancer)

RN 261929-53-7 CAPLUS

CN Propanoic acid, 3-[[(2R)-3,4-dihydro-2,5,7,8-tetramethyl-2-[(4R,8R)-4,8,12-trimethyltridecyl]-2H-1-benzopyran-6-yl]oxy]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Me Me (CH₂)₃ R (CH₂)₃ R (CH₂)₃ CHMe₂

$$Me Me Me$$
Me

RN 261929-60-6 CAPLUS

CN Acetamide, 2-[[(2R)-3,4-dihydro-2,5,7,8-tetramethyl-2-[(4R,8R)-4,8,12-trimethyltridecyl]-2H-1-benzopyran-6-yl]oxy]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

$$\begin{array}{c} \text{Me} \\ \text{Me} \\ \text{H}_2\text{N} \\ \text{O} \\ \text{Me} \end{array} \begin{array}{c} \text{(CH}_2)_3 \\ \text{Me} \\ \text{Me} \\ \text{Me} \end{array} \begin{array}{c} \text{(CH}_2)_3 \\ \text{Me} \\ \text{Me}$$

RN 261929-61-7 CAPLUS

CN Acetic acid, [[(2R)-3,4-dihydro-2,5,7,8-tetramethyl-2-[(4R,8R)-4,8,12-trimethyltridecyl]-2H-1-benzopyran-6-yl]oxy]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 261929-62-8 CAPLUS

CN Glycine, N-(carboxymethyl)-N-[[[(2R)-3,4-dihydro-2,5,7,8-tetramethyl-2-[(4R,8R)-4,8,12-trimethyltridecyl]-2H-1-benzopyran-6-yl]oxy]acetyl]- (9CI) (CA INDEX NAME)

PAGE 1-B

RN 261929-67-3 CAPLUS

CN 1-Propanamine, 3-[[(2R)-3,4-dihydro-2,5,7,8-tetramethyl-2-[(4R,8R)-4,8,12-trimethyltridecyl]-2H-1-benzopyran-6-yl]oxy]-, hydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

● HCl

PAGE 1-B

─ CHMe2

RN 261929-70-8 CAPLUS

CN Ethanol, 2-[[(2R)-3,4-dihydro-2,5,7,8-tetramethyl-2-[(4R,8R)-4,8,12-trimethyltridecyl]-2H-1-benzopyran-6-yl]oxy]-, hydrogen sulfate, compd. with N,N-diethylethanamine (1:1) (9CI) (CA INDEX NAME)

CM

CRN 261929-69-5 CMF C31 H54 O6 S

Absolute stereochemistry.

PAGE 1-A

PAGE 1-B

CHMe2

CM 2

CRN 121-44-8 CMF C6 H15 N

Εt Et-N-Et

IT 354526-64-0P 354526-65-1P

> RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of tocopherols, tocotrienols, other chroman and side chain derivs. for therapeutic use in prevention and treatment of cancer)

RN 354526-64-0 CAPLUS

Acetic acid, [[1,2,3,4-tetrahydro-2,5,7,8-tetramethyl-2-(4,8,12-CNtrimethyltridecyl)-6-quinolinyl]oxy]-, methyl ester (9CI) (CA INDEX NAME)

Me Me Me Me Me Me Me Me
$$(CH_2)_3 - CH - (CH_2)_3 - CH - (CH_$$

RN 354526-65-1 CAPLUS

Acetic acid, [[1,2,3,4-tetrahydro-1,2,5,7,8-pentamethyl-2-(4,8,12-trimethyltridecyl)-6-quinolinyl]oxy]-, methyl ester (9CI) (CA INDEX NAME)

Me Me Me Me Me
$$(CH_2)_3-CH-(CH_2)_3-CH-(CH_2)_3-CHMe_2$$
MeO-C-CH₂-O Me

RE.CNT 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 2 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN

TI Industrial preparation of water-soluble and vitamin-active polyethylene glycol ethers of tocopherol

GΙ

CN

$$\begin{array}{c|c} H & & Me \\ \hline \\ Ne & & Me \\ \hline \\ Me & &$$

AB The invention relates to novel polyethylene glycol ethers of tocopherol of formula I [wherein: R1, R2, R3 = H, Me (corresponding to tocopherols α , β , γ , ξ , ϵ , η , δ); n = 101-150] useful in chemical, medicine, cosmetol., and food industry due to their vitamin activity (vitamin E) and water solubility Compds. I are prepared via industrial scale reaction of tocopherol esters with ethylene oxide in the presence of alkali at 120-150 °C, with the ethylene oxide being supplied at such velocity as to maintain the temperature of the reaction mixture

within the defined limits. The process is carried out in an autoclave at a pressure of 1-3 atm and an ethylene oxide-to-tocopherol molar ratio between 25:1 and 150:1. The proposed method is a cost-effective preparation of water-soluble and vitamin-active tocopherol derivs. containing long polyethylene

glycol chains. For instance, compound II (n = 110) was prepared via reaction of $\alpha\text{-tocopherol}$ acetate with ethylene oxide in the presence of KOH with a yield of 84%. The compds. I retain the vitamin activity of the corresponding tocopherol acetates (no data).

AN 2003:482531 CAPLUS <<LOGINID::20070718>>

DN 140:235911

TI Industrial preparation of water-soluble and vitamin-active polyethylene glycol ethers of tocopherol

IN Kalinichenko, A. N.; Sotnikov, P. S.; Morozova, Z. V.; Danilenko, L. V.

PA OOO "MDT", Russia

SO Russ., No pp. given

CODEN: RUXXE7

DT Patent

LA Russian

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	RU 2201926	C2	20030410	RU 2000-115916	20000622 <

PRAI RU 2000-115916 20000622 <

IT 74707-11-2P 146598-22-3P 146598-23-4P

146683-37-6P

RL: IMF (Industrial manufacture); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(industrial preparation of water-soluble and vitamin-active polyethylene glycol

ethers of tocopherols prepared via reaction of tocopherol esters with ethylene oxide)

RN 74707-11-2 CAPLUS

CN Poly(oxy-1,2-ethanediyl), α -[3,4-dihydro-2,5,7,8-tetramethyl-2-[(4R,8R)-4,8,12-trimethyltridecyl]-2H-1-benzopyran-6-yl]- ω -hydroxy-, (2R)- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

- (CH₂)₃-CHMe₂

RN 146598-22-3 CAPLUS

CN Poly(oxy-1,2-ethanediyl), α -[3,4-dihydro-2,7,8-trimethyl-2-(4,8,12-trimethyltridecyl)-2H-1-benzopyran-6-yl]- ω -hydroxy- (9CI) (CA INDEX NAME)

PAGE 1-B

$$-$$
 (CH₂)₃ - CHMe₂

RN 146598-23-4 CAPLUS
CN Poly(oxy-1,2-ethanediyl), α-[3,4-dihydro-2,5,8-trimethyl-2-(4,8,12-trimethyltridecyl)-2H-1-benzopyran-6-yl]-ω-hydroxy- (9CI) (CA INDEX

PAGE 1-A

Me

Me

(CH2) 3 - CH - (CH2) 3 - CH

PAGE 1-B

-(CH₂)₃-CHMe₂

RN 146683-37-6 CAPLUS Poly(oxy-1,2-ethanediyl), α -[(2R)-3,4-dihydro-2,8-dimethyl-2-[(4R,8R)-4,8,12-trimethyltridecyl]-2H-1-benzopyran-6-yl]- ω -hydroxy-(9CI) (CA INDEX NAME)

PAGE 1-B

- (CH₂)₃- CHMe₂

L6 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN

TI Preparation of tocopherols, tocotrienols, other chromans and side chain derivs. as potential antiproliferative and proapoptotic agents

GI

AB Derivs. of tocopherol, tocotrienol and other chromans of formula I (X and Y independently are oxygen, nitrogen or sulfur; when Y is nitrogen, nitrogen is substituted with R6 and R6 = H or Me; R1 = alkyl, alkenyl, alkynyl, aryl, heteroaryl, carboxylic acid, carboxylate, carboxamide, ester, thioamide, thiolacid, thiol ester, saccharide, alkoxy-linked saccharide, amine, sulfonate, sulfate, phosphate, alc., ethers or nitrites; R2, R3 = hydrogen or R4; R4 = Me, benzyl carboxylic acid, benzyl carboxylate, benzyl carboxamide, benzyl ester, saccharide or amine; and R5 = alkenyl) were prepared as antiproliferative and proapoptotic agents for the potential treatment of cell proliferative diseases. Thus, α-tocopherol was treated with Me bromoacetate and NaOH in N, N-dimethylformamide to give II. II showed effective growth inhibitory

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properties (apoptotic inducing) in a wide variety of human cancer cell
     lines, including breast, prostate, cervical, and ovarian cancers with EC50
     values ranging from 1-20 μg/mL.
     2002:595501 CAPLUS <<LOGINID::20070718>>
AN
DN
     137:140656
     Preparation of tocopherols, tocotrienols, other chromans and side chain
TI
     derivs. as potential antiproliferative and proapoptotic agents
IN
     Sanders, Bob G.; Kline, Kimberly; Yu, Weiping
     Research Development Foundation, USA
PA
    U.S. Pat. Appl. Publ., 44 pp., Cont.-in-part of U.S. Ser. No. 502,592.
SO
     CODEN: USXXCO
DT
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LΑ
    English
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     RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic
     preparation); THU (Therapeutic use); BIOL (Biological study);
     PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
        (preparation of tocopherols, tocotrienols, other chromans and side chain
        derivs. as potential antiproliferative, proapoptotic agents for the
        treatment of cancer)
     200701-54-8 CAPLUS
RN
     Ethanol, 2-[((2R)-3,4-dihydro-2,5,7,8-tetramethyl-2-[(4R,8R)-4,8,12-
CN
     trimethyltridecyl]-2H-1-benzopyran-6-yl]oxy]- (9CI) (CA INDEX NAME)
```

Me Me
$$(CH_2)_3$$
 $(CH_2)_3$ $(CH$

IT 261929-53-7P 261929-60-6P 261929-61-7P

261929-62-8P 261929-67-3P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of tocopherols, tocotrienols, other chromans and side chain derivs. as potential antiproliferative, proapoptotic agents for the treatment of cancer)

RN 261929-53-7 CAPLUS

CN Propanoic acid, 3-[[(2R)-3,4-dihydro-2,5,7,8-tetramethyl-2-[(4R,8R)-4,8,12-trimethyltridecyl]-2H-1-benzopyran-6-yl]oxy]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 261929-60-6 CAPLUS

CN Acetamide, 2-[[(2R)-3,4-dihydro-2,5,7,8-tetramethyl-2-[(4R,8R)-4,8,12-trimethyltridecyl]-2H-1-benzopyran-6-yl]oxy]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

$$\begin{array}{c} \text{Me} \\ \text{Me} \\ \text{H}_2\text{N} \\ \text{O} \\ \text{Me} \end{array} \begin{array}{c} \text{(CH}_2\text{)}_3 \\ \text{Me} \\ \text{Me} \\ \text{Me} \end{array} \begin{array}{c} \text{(CH}_2\text{)}_3 \\ \text{Me} \\$$

RN 261929-61-7 CAPLUS

CN Acetic acid, [[(2R)-3,4-dihydro-2,5,7,8-tetramethyl-2-[(4R,8R)-4,8,12trimethyltridecyl]-2H-1-benzopyran-6-yl]oxy]-, methyl ester (9CI) (CA INDEX NAME)

RN 261929-62-8 CAPLUS

CN Glycine, N-(carboxymethyl)-N-[[[(2R)-3,4-dihydro-2,5,7,8-tetramethyl-2-[(4R,8R)-4,8,12-trimethyltridecyl]-2H-1-benzopyran-6-yl]oxy]acetyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-B

$$-(CH2)3$$
CHMe₂

RN 261929-67-3 CAPLUS ...

CN 1-Propanamine, 3-[[(2R)-3,4-dihydro-2,5,7,8-tetramethyl-2-[(4R,8R)-4,8,12-trimethyltridecyl]-2H-1-benzopyran-6-yl]oxy]-, hydrochloride (9CI) (CA INDEX NAME)

HCl

PAGE 1-B

CHMe₂

L6 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN

Storage-stable compositions of glycerol monoalkyl ethers TI

AB The present invention relates to compns. which comprise a combination (a) of 1 or more glycerol monoalkyl ethers, ROCH2CHOHCH2OH (where R= a branched or unbranched C3-18 alkyl, in which the alkyl group can be substituted by 1 or more hydroxyl and/or C1-4 alkoxy and/or the alkyl chain can be interrupted by up to 4 oxygen atoms), and (b) an antioxidant or 2 or more antioxidants as stabilizers, the simultaneous presence of phosphocholines and phosphocholine derivs. being excluded. 3-[(2-Ethylhexyl)oxy]-1,2-propanediol (Sensiva SC50) was mixed with a variety of substances, and the stability of the compns. during storage at

room temperature in blue polyethylene bottles was tested. Following preparation of

the samples, the value for ppm of H2O2 and the pH were determined at regular intervals. BHT, BHA, vitamin E and dexpanthenol stabilize the glycerol monoalkyl ethers over a long period, and in particular the appearance of peroxides, determined by the Merckoquant peroxide test, is avoided and as a result the neck-in effect is no longer observed when the antioxidants are

AN

DN 136:42534

TI Storage-stable compositions of glycerol monoalkyl ethers

Beilfuss, Wolfgang; Gradtke, Ralf IN

PA Air Liquide Sante (International), Fr.; Schuelke & Mayr G.m.b.H.

SO PCT Int. Appl., 32 pp.

CODEN: PIXXD2

DT Patent

LΑ English

FAN.CNT 1

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OS
     MARPAT 136:42534
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     74707-11-2
     RL: COS (Cosmetic use); THU (Therapeutic use); BIOL (Biological
     study); USES (Uses)
        (storage-stable compns. of glycerol monoalkyl ethers)
RN
     .74707-11-2 CAPLUS
CN
     Poly(oxy-1,2-ethanediyl), \alpha-[3,4-dihydro-2,5,7,8-tetramethyl-2-
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     (2R) - (9CI) (CA INDEX NAME)
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PAGE 1-A

PAGE 1-B

- (CH₂)₃ - CHMe₂

RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 5 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN
TI Preparation of tocopherols, tocotrienols, other chroman and side chain derivatives that induce cell apoptosis for therapeutic use as antiproliferative agents

GI

AΒ Tocopherol analogs, such as I [X = 0, NH, S; Y = 0, NH, S; R1 = alky], alkenyl, alkynyl, aryl, heteroaryl, carboxyl, carboxamide, thiocarboxyl, etc.; R2, R3, R4 = H, Me, benzyl, carboxyl, carboxamide, amine, saccharide; R5 = alkyl, alkenyl, alkynyl, aryl, heteroaryl, carboxyl, carboxamide], were prepared for pharmaceutical use as antiproliferative agents which induce cell apoptosis for treatment of cancers and diseases involving cell proliferation, such as autoimmune diseases, psoriasis, etc.. Thus, $(R,R,R)-\alpha$ -tocopherol derivative II was prepared in 88% yield by condensation of $(R,R,R)-\alpha$ -tocopherol and BrCH2CO2Me in DMF using NaOH followed by hydrolysis with 5 N HCl. The prepared tocopherol analogs were tested for their ability to induce apoptosis in a number of cancer cell lines, such as breast, cervical, colon, prostate, etc.

AN 2001:597976 CAPLUS <<LOGINID::20070718>>

DN 135:166941

TI Preparation of tocopherols, tocotrienols, other chroman and side chain derivatives that induce cell apoptosis for therapeutic use as antiproliferative agents

ΙN Sanders, Robert G.; Kline, Kimberly; Hurley, Laurence; Gardner, Robb; Menchaca, Marla; Yu, Weiping; Ramanan, Puthucode N.; Liu, Shenquan; Israel, Karen

PA Research Development Foundation, USA

PCT Int. Appl., 120 pp. SO

CODEN: PIXXD2

DT Patent LΑ

English FAN.CNT 4

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PATENT NO.
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                    IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
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     US 1998-101543P
                          Р
                                19980923
                                           <--
     US 1999-404001
                          A2
                                 19990923
                                           <--
     WO 2001-US4168
                          W
                                20010209
os
     MARPAT 135:166941
IT
     200701-54-8P 354526-64-0P 354526-65-1P
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); RCT (Reactant); SPN (Synthetic preparation);
     THU (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); RACT (Reactant or reagent); USES (Uses)
        (preparation of tocopherols, tocotrienols, other chromans that induce cell
        apoptosis for therapeutic use as antiproliferative agents)
RN
     200701-54-8 CAPLUS
CN
     Ethanol, 2-[[(2R)-3,4-dihydro-2,5,7,8-tetramethyl-2-[(4R,8R)-4,8,12-
     trimethyltridecyl]-2H-1-benzopyran-6-yl]oxy]- (9CI) (CA INDEX NAME)
```

Absolute stereochemistry.

Me Me
$$(CH_2)_3$$
 R $(CH_2)_3$ $(CH_2)_3$

RN 354526-64-0 CAPLUS
CN Acetic acid, [[1,2,3,4-tetrahydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-6-quinolinyl]oxy]-, methyl ester (9CI) (CA INDEX NAME)

Me Me Me Me Me Me CCH₂)
$$_3$$
 - CH- (CH₂) $_3$ - CH- (CH₂) $_3$ - CHMe₂ MeO-C-CH₂-O Me

RN 354526-65-1 CAPLUS

CN Acetic acid, [[1,2,3,4-tetrahydro-1,2,5,7,8-pentamethyl-2-(4,8,12-trimethyltridecyl)-6-quinolinyl]oxy]-, methyl ester (9CI) (CA INDEX NAME)

IT 261929-53-7P 261929-60-6P 261929-61-7P

261929-62-8P 261929-67-3P 261929-70-8P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic

use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of tocopherols, tocotrienols, other chromans that induce cell apoptosis for therapeutic use as antiproliferative agents)

RN 261929-53-7 CAPLUS

CN Propanoic acid, 3-[[(2R)-3,4-dihydro-2,5,7,8-tetramethyl-2-[(4R,8R)-4,8,12-trimethyltridecyl]-2H-1-benzopyran-6-yl]oxy]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 261929-60-6 CAPLUS

CN Acetamide, 2-[[(2R)-3,4-dihydro-2,5,7,8-tetramethyl-2-[(4R,8R)-4,8,12-trimethyltridecyl]-2H-1-benzopyran-6-yl]oxy]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

$$\begin{array}{c} \text{Me} \\ \text{Me} \\ \text{H}_2\text{N} \\ \text{Q} \end{array} \begin{array}{c} \text{Me} \\ \text{Me} \end{array} \begin{array}{c} \text{(CH}_2)_3 \\ \text{Me} \\ \text{Me} \end{array} \begin{array}{c} \text{(CH}_2)_3 \\ \text{Me} \\ \text{Me} \end{array} \begin{array}{c} \text{(CH}_2)_3 \\ \text{Me} \\ \text{Me} \end{array}$$

RN 261929-61-7 CAPLUS

CN Acetic acid, [[(2R)-3,4-dihydro-2,5,7,8-tetramethyl-2-[(4R,8R)-4,8,12-trimethyltridecyl]-2H-1-benzopyran-6-yl]oxy]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Me
$$O$$
 R $(CH_2)_3$ R $(CH_2)_3$

RN 261929-62-8 CAPLUS

CN Glycine, N-(carboxymethyl)-N-[[[(2R)-3,4-dihydro-2,5,7,8-tetramethyl-2-[(4R,8R)-4,8,12-trimethyltridecyl]-2H-1-benzopyran-6-yl]oxy]acetyl]- (9CI)

(CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

HO₂C Me Me (CH₂)
$$_3$$
 R (CH₂) $_3$ R Me Me Me

PAGE 1-B

RN 261929-67-3 CAPLUS

CN 1-Propanamine, 3-[[(2R)-3,4-dihydro-2,5,7,8-tetramethyl-2-[(4R,8R)-4,8,12-trimethyltridecyl]-2H-1-benzopyran-6-yl]oxy]-, hydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

Me
$$(CH_2)_3$$
 $(CH_2)_3$
 (CH_2)

● HCl

PAGE 1-B

CHMe2

CN Ethanol, 2-[[(2R)-3,4-dihydro-2,5,7,8-tetramethyl-2-[(4R,8R)-4,8,12-trimethyltridecyl]-2H-1-benzopyran-6-yl]oxy]-, hydrogen sulfate, compd. with N,N-diethylethanamine (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 261929-69-5 CMF C31 H54 O6 S

Absolute stereochemistry.

PAGE 1-A

PAGE 1-B

CHMe2

CM 2

CRN 121-44-8 CMF C6 H15 N

Et | Et-N-Et

RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 6 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN
TI Preparation of tocopherols, tocotrienols, other chroman and side chain derivatives for use as antitumor agents and for inducing cell apoptosis
GI

$$R^3$$
 R^4
 R^5
 Me
 R^1X
 R^2
 R^2
 R^3
 R^4
 R^5
 R^6
 R^6

AB Chromans I [R1 = alkyl, alkenyl, alkynyl, aryl, herteroaryl, carboxyl, carboxamide, thioamide, saccharide, amine, sulfate, phosphate, etc.; R2, R3, R4 = H, Me, benzylcarboxylate, saccharide, amino, etc.; R5 = alkyl, alkenyl, alkynyl, aryl, herteroaryl, carboxyl, carboxamide; X = O, NH, S] were prepared for pharmaceutical use as antitumor agents and cell apoptosis inducing agents. Thus, tocopherol derivative II (R1 = CH2CO2H, X = O) was prepared in 88% yield via O-alkylation of (+)- α -tocopherol with Me bromoacetate. The prepared chromans were tested for cell apoptosis activity against a variety of cancer cell lines.

·II

AN 2000:209907 CAPLUS <<LOGINID::20070718>>

DN 132:237223

TI Preparation of tocopherols, tocotrienols, other chroman and side chain derivatives for use as antitumor agents and for inducing cell apoptosis

IN Kline, Kimberly; Sanders, Bob G.; Hurley, Laurence; Gardner, Robb; Menchaca, Marla; Yu, Weiping; Ramanan, Puthucode N.; Liu, Shenquan; Israel, Karen

PA Research Development Foundation, USA

SO PCT Int. Appl., 101 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 4

PAN.CN				
P	PATENT NO.	KIND DATE	APPLICATION NO.	DATE
PI W			WO 1999-US21778	
			BB, BG, BR, BY, CA, CE GE, GH, GM, HR, HU, I	
			LK, LR, LS, LT, LU, L	
			RO, RU, SD, SE, SG, S	I, SK, SL, TJ,
		UA, UG, UZ, VN, LS. MW. SD. SL.	YU, ZA, ZW SZ, TZ, UG, ZW, AT, B	E. CH. CY. DE.
	DK, ES, FI,	FR, GB, GR, IE,	IT, LU, MC, NL, PT, S	
	CG, CI, CM,	GA, GN, GW, ML,	MR, NE, SN, TD, TG	
С	CA 2345079	A1 20000330	CA 1999-2345079	19990923 <
			AU 1999-61553	
A	AU 757013	B2 20030130		
E	SP 1115398	A1 20010718	EP 1999-948352	19990923 <
	R: AT, BE, CH,	DE, DK, ES, FR,	GB, GR, IT, LI, LU, N	
	IE, SI, LT,	•		
C	CN 1325303	A 20011205	CN 1999-812829	19990923 <
J	JP 2002526446	T 20020820	JP 2000-573733	19990923 <
N	JP 2002526446 NZ 510732	A 20040130	NZ 1999-510732	19990923 <
R	RU 2232758	C2 20040720	RU 2001-111019	19990923 <
С	CN 1706838			

	ĬL 142082	Α	20051218	IL	1999-142082	19990923 <	
	TW 592695	В	20040621	TW	1999-88120073	19991117 <	
	ZA 2001002057	Α	20020319	ZA	2001-2057	20010313 <	
PRAI	US 1998-101542P	P	19980923	<			
	CN 1999-812829	A3	19990923	<			
	WO 1999-US21778	W	19990923	<			
os	MARPAT 132:237223		•		•		
IT	200701-54-8P						
	RL: BAC (Biological activity or effector, except adverse); BSU (Biological						
	study, unclassified); RCT (Reactant); SPN (Synthetic preparation);						
	THU (Therapeutic use); BIOL (Biological study); PREP						
	(Preparation); RACT (Reactant or reagent); USES (Uses)						
	(preparation of tocopherols, tocotrienols, other chroman and side chain						
	derivs. for use as antitumor agents and for inducing cell apoptosis)						
		s anci	cullor agen	cs am	a for inducting cerr	apoptosis/	
RN	200701-54-8 CAPLUS					•	
CN	Ethanol, 2-[[(2R)-3,	4-dihy	dro-2,5,7,	8-tet	ramethyl-2-[(4R,8R)]	-4,8,12-	
	trimethyltridecyl]-2	H-1-be	nzopyran-6	-y1]o	xy]- (9CI) (CA IND	EX NAME)	

Absolute stereochemistry.

Me Me
$$(CH_2)_3$$
 $(CH_2)_3$ $(CH$

Absolute stereochemistry.

Me Me
$$(CH_2)_3$$
 $(CH_2)_3$ $(CH_2)_4$ $(CH_2)_3$ $(CH_2)_4$ $(CH$

RN 261929-60-6 CAPLUS
CN Acetamide, 2-[[(2R)-3,4-dihydro-2,5,7,8-tetramethyl-2-[(4R,8R)-4,8,12-trimethyltridecyl]-2H-1-benzopyran-6-yl]oxy]- (9CI) (CA INDEX NAME)

RN 261929-61-7 CAPLUS
CN Acetic acid, [[(2R)-3,4-dihydro-2,5,7,8-tetramethyl-2-[(4R,8R)-4,8,12-trimethyltridecyl]-2H-1-benzopyran-6-yl]oxy]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 261929-62-8 CAPLUS
CN Glycine, N-(carboxymethyl)-N-[[[(2R)-3,4-dihydro-2,5,7,8-tetramethyl-2[(4R,8R)-4,8,12-trimethyltridecyl]-2H-1-benzopyran-6-yl]oxy]acetyl]- (9CI)
(CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-B

RN 261929-67-3 CAPLUS CN 1-Propanamine, 3-[[(2R)-3,4-dihydro-2,5,7,8-tetramethyl-2-[(4R,8R)-4,8,12trimethyltridecyl]-2H-1-benzopyran-6-yl]oxy]-, hydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

● HCl

PAGE 1-B

CHMe2

RN 261929-70-8 CAPLUS

CN Ethanol, 2-[[(2R)-3,4-dihydro-2,5,7,8-tetramethyl-2-[(4R,8R)-4,8,12-trimethyltridecyl]-2H-1-benzopyran-6-yl]oxy]-, hydrogen sulfate, compd. with N,N-diethylethanamine (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 261929-69-5 CMF C31 H54 O6 S

Absolute stereochemistry.

PAGE 1-A

Me Me
$$(CH_2)_3$$
 $(CH_2)_3$ $(CH$

CHMe₂

CM 2

CRN 121-44-8 CMF C6 H15 N

Et | Et-N-Et

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L6 ANSWER 7 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN
- TI Aqueous compositions containing corticosteroids for nasal and pulmonary delivery
- AB The present invention provides compns. containing corticosteroid compds. as active agents for the treatment of ailments and diseases of the respiratory tract, particularly the lungs, by way of nasal and pulmonary administration. The corticosteroid compds. are present in a dissolved state in the compns. The compns. can be formulated in a concentrated, essentially non-aqueous form for storage or in a diluted, aqueous-based form for

ready delivery. The corticosteroid composition contains an ethoxylated derivative

of vitamin E and/or a polyethylene glycol fatty acid ester as the high-HLB surfactant present in the formulation. The compns. are ideally suited for inhaled delivery with a nebulizer or for nasal delivery. Thus, beclomethasone dipropionate monohydrate (2.8 mg) was dissolved in 997.2 mg of a 2:1 weight/weight mixture of PEG-200 and α -tocopherol polyethylene glycol succinate and the diluted (1:6.65 by volume) with water. The final solution contained 420 μg beclomethasone dipropionate/mL of solution

AN 2000:14987 CAPLUS <<LOGINID::20070718>>

- DN 132:83652
- TI Aqueous compositions containing corticosteroids for nasal and pulmonary delivery
- IN Saidi, Zahir; Klyashchitsky, Boris
- PA LDS Technologies, Inc., USA
- SO PCT Int. Appl., 31 pp. CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND DATE	APPLICATION NO.	DATE
ΡI	WO 2000000181	A1 20000106	WO 1999-US14351	19990624 <
		JP, MX, NO, US		
	PT. SE	, CY, DE, DK, ES,	FI, FR, GB, GR, IE, IT	, EU, MC, NL,
	US 6241969	B1 20010605	US 1998-105838	19980626 <
	CA 2335900	A1 20000106	CA 1999-2335900	19990624 <
	AU 9947171	A 20000117	AU 1999-47171	19990624 <

EP 1089715 **A1** 20010411 EP 1999-930689 19990624 <--AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI JP 2002519318 Т 20020702 JP 2000-556766 19990624 <--AT 311174 Т 20051215 AT 1999-930689 19990624 <--PRAI US 1998-105838 19980626 A2 <--WO 1999-US14351 19990624 <--IT 74707-11-2 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (aqueous compns. containing corticosteroids for nasal and pulmonary delivery) RN 74707-11-2 CAPLUS Poly(oxy-1,2-ethanediyl), α -[3,4-dihydro-2,5,7,8-tetramethyl-2-CN [(4R, 8R) -4, 8, 12-trimethyltridecyl] -2H-1-benzopyran-6-yl] - ω -hydroxy-, (2R) - (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

- (CH₂)₃ - CHMe₂

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 8 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN
TI synthesis and activity of polyoxypropylenepolyoxyethylene vitamin E
derivs.
GI

AB Synthesis and activity of polyoxypropylenepolyoxyethylene vitamin E (I) $\{R = Me; n = 1-3; R1 = (OCH2CH2)m; R2 = [OCH(Me)CH2]p\}$ is disclosed. I is prepared by subjecting vitamin E to polyethoxylation and then, to

polypropoxylation to a proper extent. I Is of superior anti-oxidation activity with water solubility The bent chain of I increases the cross-sectional area of the whole mol., making it difficult for the mol. to penetrate into the skin and safe to apply to the skin. I has superb surface activity by forming close bilayer vesicle structures, like phospholipids or dialkyl surfactants, so it can be advantageously used in the cosmetic, food, and medical industries. ΑN DN 132:23111 TI synthesis and activity of polyoxypropylenepolyoxyethylene vitamin E derivs. Kim, Young Dae; Park, Keun Ja; Kim, Jung Soo; Kim, Ji Soo IN PA S. Korea SO PCT Int. Appl., 45 pp. CODEN: PIXXD2 ĎΤ Patent LA English FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. -----. ____ -----------. -----PΙ WO 9962896 WO 1999-KR270 A1 19991209 19990601 <--W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG KR 2000000840 Α 20000115 KR 1998-20705 19980603 <--AU 9941701 Α 19991220 AU 1999-41701 19990601 <--EP 1091951 EP 1999-925424 A1 20010418 19990601 <--EP 1091951 B1 20020904 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI BR 9910916 Α 20011016 BR 1999-10916 19990601 <--JP 2002517389 Т 20020618 JP 2000-552108 19990601 <--JP 3547399 B2 20040728 AT 223398 Т 20020915 AT 1999-925424 19990601 <--ES 2183562 Т3 20030316 ES 1999-925424 19990601 <--CN 1131225 В 20031217 CN 1999-808383 19990601 <--US 6355811 В1 20020312 US 2000-701719 20001201 <--PRAI KR 1998-20705 Α 19980603 WO 1999-KR270 W 19990601 <--IT 219845-09-7P RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses) (synthesis and activity of polyoxypropylenepolyoxyethylene vitamin E derivs.) RN219845-09-7 CAPLUS CNPoly(oxy-1,2-ethanediyl), α -[(2R)-3,4-dihydro-2,5,7,8-tetramethyl-2-[(4R,8R)-4,8,12-trimethyltridecyl]-2H-1-benzopyran-6-yl]-\omega-hydroxy-, rel- (9CI) (CA INDEX NAME)

PAGE 1-B

- (CH₂)₃-CHMe₂

RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT